[Landscape, with Cattle and Figures.—Wouvermans.]

GRATUITOUS EXHIBITIONS OF PICTURES.

DULWICH GALLERY.

We know of no painter of landscape whose works are more familiar to the generality of admirers of art than those of Wouvermans (or, more properly, Wouwermans). Indeed, there appear to be more of his best efforts in English collections than in any of the continental galleries, either public or private. At Dulwich there are no less than eleven, a circumstance which probably arose from the great market-value in this country of his pictures; for the person who originally collected these works, Mr. Noel Desenfans, was a dealer in such matters. Upon his decease, they passed to Sir Francis Bourgeois, by whom the whole were bequeathed to the master and wardens of Dulwich College.

The popularity of this painter mainly depends upon the familiar nature of his subjects. They are always such as appeal to the understandings of the many, though their management is usually of that order which requires some insight into the principles of art fully to value. But even without wholly appreciating the merit of one of his pictures as a work of art, we can readily see that there is a fidelity in the minutiæ, an accuracy in the drawing, and a delicacy in the finish, which at once appeal to the eye and gratify its perceptions.

The gallant cavalier, the rude and simple boor, the homely housewife, or the industrious artisan, find able and vivid representatives in the emanations of his pencil; nor is the exactness of his anatomical knowledge of the horse or the spirit of his delineation of its variety of action less worthy of devotion. The distinctive marks by which the various trees and shrubs with which he enriches his landscapes may be known, are always carefully developed; and though the painting of them is made subservient to the general effect of the whole subject, still they present to the view just representations of Dutch nature; and indeed the entire aspect of his landscapes cannot fail to impress upon the spectator a vivid notion of the scenery of the painter's native country.

The composition of the picture from which Mr. Jackson has executed the wood-engraving placed at the head of this article, is one of a very unusual character, and such as required all the painter-like skill and dexterous management of the artist to render effective. A single glance will satisfy us of the fine manner in which Wouvermans has overcome his voluntarily adopted difficulties. A mind less stored than his own

with the principles both of linear and aerial perspective, might have so placed the two carts that they could readily be distinguished as to their relative distances from the foreground, by their position on the line of the picture. He has not resorted to any such means; but with a boldness, entirely justified by his masterly success, has depended alone on his command of aerial perspective to afford the scale of such relative distances, and has placed one of the vehicles immediately, or nearly so, above the other. Had there been the slightest failure in the nice gradation of tints between these two objects, the intervening space, and the high bank of the river, the whole truth of the work would have been destroyed. As it is, however, it is impossible not to be struck with the charming fidelity to nature displayed in every part. The figures and the horses are drawn with life-like precision, while the mode of execution, its freedom, lightness, delicacy and finish, qualities rarely combined, render the Landscape with Cattle and Figures a work of high order in this particular class of painting. Truly may it be said, in the words of Hazlitt, of the animal life here introduced, "there is immense knowledge and character in Wouvermans' horses;" though neither in this nor in the vast majority of his pictures can we agree with the same critic, that "he seldom gets beyond the camp or the riding-school."

The defect frequently observable in the paintings of Wouvermans, and upon which we shall at a subsequent part of this paper enlarge, namely, the heaviness of the skies, is not so apparent in the present subject as in other and more celebrated, though by no means superior specimens in the Dulwich collection. Indeed, in this Landscape with Cattle and Figures there is a consistency of management which fully compensates for the darkness of the sky. All is harmonious and subdued; no glare of sunshine in one place, and inky blackness in another; no effect produced upon the earth, for which an observant spectator cannot find an adequate cause in the source of light.

The history of this artist is shortly as follows:—he was one of three sons of Paul Wouvermans, a painter of history, of little celebrity, who all adopted painting as a profession. He received the rudiments of his education in the art from his father, and then studied under John Wynants, a landscape painter of great eminence. So rapid was his advance under this most judicious instructor, that he was even permitted, at an early period, to decorate the works of Wynants with figures and animals, which he knew so admirably well how to represent. On quitting the studio of Wynants, Wouvermans carefully painted from nature, in the neighbourhood of Haerlem, the place of his birth, and from which locality it is generally believed he never removed. Notwithstanding the great merit of his works, he languished in poverty and obscurity, though to supply the wants of his family he was compelled to work with unceasing diligence. His pictures were bought at insignificant prices, and rather, even then, it would appear, from a feeling of compassion for the artist, than any estimation of his labours. At the time that Wouvermans painted, Peter de Laer, known by the name of Bamboccio, was in great vogue with the collectors of Holland; and whilst that artist's works were eagerly bought, the native master was allowed to pine in neglect. De Witt, however, it is said, became aware of the powers of the unnoticed painter, and having become the purchaser of a picture by Bamboccio, engaged his countryman to execute a companion one to it, which, when completed, the purchaser declared to be in all respects superior to that of De Laer. Whether this applause would have induced greater employment, it is impossible to say, for Wouvermans died soon after, expiring at the age of forty-eight, in the year 1668. Indeed, it has been asserted that the expression of approbation so unusual to the painter's ears had such a deep effect on him as to cause his speedy dissolution. But whatever was the immediate cause of his death, it is clear that he lived and died in poverty. He had so keen a sense of the neglect he experienced, that before his decease he destroyed a great number of his drawings and other valuable works, declaring that as his exertions had been so ill recompensed, his son should not by the possession of them be induced to follow a pursuit from which he had himself derived nothing but beggary and wretchedness.

Admitting, as we cheerfully do, the many excellencies of Wouvermans, we cannot but think that he has been by many writers extravagantly overrated. With a reverence for the acute critical judgment of Sir Joshua Reynolds, we feel bound to say that the encomiums he bestows upon him are, in our opinion, far higher than deserved. The President, after admitting that some of the painter's works, those of his earlier and of his later days, "have not that liquid softness which characterizes his best works," observes, "upon the whole, he is one of the few painters whose excellency in his way is such as leaves nothing to be wished for." Mr. Pilkington adds his tribute of applause by saying, "his skies, air, trees, and plants, are all exact and lively imitations of nature;" and Mr. Bryan follows in the same strain, declaring "his skies and distances, his trees and plants, are the genuine representations of nature."

Now it is precisely because we believe that the skies of Wouvermans are not "exact," or "lively," or "genuine" representations of nature; it is for the reason, that in the vast majority of his works the skies have not "that liquid softness" which is desirable as an accompaniment to the scenes he depicts, that we do not so greatly admire his labours; and it requires no very extensive degree of reading to know that it was this leaden and unnaturally gloomy appearance of the skies in his works which induced the Dutch connoisseurs to neglect them as they did. In a word, a careful examination of the many pictures which are in this country will satisfy the inquirer, that in a great number of instances the artist has thrown the light of a broad sunshine upon his grounds and figures, whilst the sky is composed of heavy slate-coloured clouds, the manifestation of which is utterly inconsistent with the presence of the sun. Indeed, in more parts than the skies of many of his pictures is this heaviness or slatiness of hue observable, and the effect is to detract, in our opinion, in a very vast degree, from the other manifest excellencies of his works.

Thus freely stating our objections to the general tyle of Wouvermans, we must join with his encomiasts in awarding our praise to the charming truth of his figures, horses, and cattle, and to the exquisite purity and lightness of his touch. The groups he introduces are masterly in the extreme; free, easy, and full of character, and when in action replete with graceful activity. His pencilling of the foregrounds is admirably contrasted, by its greater fulness and vigour, with the minute touches upon heads and hands, and the ornaments of the figures, and the accessories of his compositions. Indeed, we are disposed to think that but for the one defect we have pointed out, the praise of Sir Joshua Reynolds, that "upon the whole he is one of the few painters whose excellency in his way is such as leaves nothing to be wished for," would have been richly merited.

The works of this artist generally represent hunting and hawking parties, horse-fairs, encampments, halts of travellers, farriers' shops, and other subjects like that at the head of this article, which afford the opportunity of introducing animal life in great variety, and

which he has done in a manner so correct and spirited, that he has never been surpassed, and very rarely equalled. The number of these productions, highly finished as they are, is truly surprising, and bear witness that the painter must have possessed a most fertile invention, and a no less perfect command of his pencil.

ENDEMIC AND EPIDEMIC DISEASES.

CERTAIN of the diseases which afflict the human body are found to be confined to particular localities, and are thence termed *endemic*, from two Greek words signifying that which is in or among a people. Others again, which, prevailing only for a certain time over a greater or less tract of country, afterwards disappear, again to return at uncertain periods, are termed *epidemic*, from Greek words signifying upon or over a people. A few general particulars concerning each of these, separated from medical details, will prove perhaps interesting to the reader.

ENDEMIC DISEASES are for the most part attributable to some peculiarities of the soil, air, food, or habits of the localities in which they appear. Abject poverty, and its necessary consequences, want of cleanliness, bad or deficient diet, and moral degradation, is the fertile source of these maladies; while the removal of many of these evils is often attended with the disappearance of the endemics. We may lay it down as a law, says M. Andral, that the number and gravity of many of these complaints are found in an inverse proportion to the degree of civilization and comfort diffused in a country. Countries formerly healthy have become the sources of the most pestilential diseases, not from any change of climate they have undergone, but from the existence of bad institutions, which have neglected the cultivation of the arts of industry. Thus Egypt, formerly so healthy, is now never free from the plague. A great part of the coast of Italy, formerly rendered inhabitable by the Romans, is now the seat of malignant fever, while in Ireland the typhus fever annually sweeps off thousands of the inhabitants of its cities. On the other hand, he adds, in any country in which human intelligence is permitted to increase and develop itself in every point of view, so does the sanatory state of its population augment. Thus it is well known to what an extent various diseases (we may mention plague, cutaneous affections, scurvy, &c.) have disappeared of late years in European cities. All experience tends to prove that the health of a country will be proportionally good to the degree of comfort enjoyed by its inhabitants. M. Villerme states that the number of deaths in the different parts of Paris is not so much proportionate to the crowded state of the houses as it is to the number of houses which are untaxed in the different localities. So too the improvement in the state of prisons affords a pleasing proof of how much the amelioration of man's condition rests with man himself. Thus the mortality in the prisons of Lyon, from 1800 to 1806, averaged one in nineteen; from 1820 to 1826, one in forty-three; at Rouen, from 1812 to 1814, one in four; from 1815 to 1826, one in fifty-one. Although we may do much, yet there are external influences in operation less under the control of man, the chief of which have reference to the state of the atmosphere, or of the aliments employed. Many of these are, however, susceptible of amelioration by improving the physical condition of the localities, or, where this is impracticable, removing from them. A small class of these maladies are not explicable upon any known grounds. Medical observers are by degrees becoming convinced that for the due comprehending the nature and relief of endemical diseases a more accurate study of topography than has yet been undertaken is essential.

It has been remarked that the inhabitants of countries or places in which diseases prevail endemically are very often exempt from other serious forms of disease. The natives of a country often become inured by habit to circumstances which at once manifest their evil influence upon the newly arrived stranger. This is especially seen in tropical regions. In countries, too, inhabited by different races of men, as the Negroes and Malays, the Negroes and Americans, the same circumstances do not produce the same effect upon these different varieties. The water of the Seine produces disorder in all but the Parisian who is accustomed to its use. So too the treatment of the self-same disease is often found to be required to be different, according to the locality in which the person affected resides, and even to the rank of society to which he belongs.

We will now enumerate some of the principal endemical diseases.

A more perfect example of an endemic could scarcely be found than the *Pellagra*, which attacks so large a proportion (a sixth or seventh part) of the inhabitants of the alluvial plains of Lombardy, stretching out between the Alps and the Po. The public hospitals, large as they are, are insufficient to accommodate all the subjects of this disease, many of whom perish in their own habitations, or drag on a lingering and miserable existence. The disease, on its first appearance, much resembles erysipelas, leaving the skin, however, very rough; attacks are renewed from time to time for the space of three or more years, during which the skin becomes entirely altered from its natural structure, and takes on the appearance "of the dry black skin of a fish;" and this roughened appearance of the skin has obtained the disease its name. The patient loses the use of his limbs, and becomes the victim of severe pains in different parts of the body, and of a most tormenting sensation of heat down the spine, depriving him of rest by day and sleep by night. The mind is also frequently disordered from the intensity of the suffering, and Dr. Holland found one-third of the patients of the lunatic hospital at Milan to be sufferers from this disease. A propensity to suicide frequently exists, and the mode of committing this has so frequently been by drowning, that Strambi calls the disease *hydromania*. The cause of the disease is involved in obscurity. The Milanese physicians attribute it to the poverty and bad diet of the peasantry (it is rarely found in towns), and Vaccari calls it emphatically the "mal de misère." The diet is almost exclusively vegetable, consisting of bad sour rye-bread, maize, rice, &c.; for rarely, if ever, does the poor peasant, in that prolific soil, partake of the herd he tends or the juice of the vine he cultivates. "Had Rogers and Wordsworth," says Dr. James Johnson, "while celebrating the borders of Como and Lago Maggiore, representing them as terrestrial paradises, been acquainted with the pestilence that afflicts one-seventh of the inhabitants, they would have curbed a little their poetic fancies, or added a background to the picture."

The *Plica Polonica*, or plaited hair, is a curious disease prevalent in Poland especially, although it is sometimes also seen in Russia, Prussia, Belgium, and Hungary. The popular opinion is that it was introduced into Poland by the Tartars in the twelfth or thirteenth century, but some authors assign as late a period as the sixteenth for its first appearance. The disease consists in an exuberant growth of the hair, which becomes matted and interlaced in the most inextricable confusion. So far from desiring to prevent this, however, the Pole is proud of it, and endeavours, by the addition of grease and hot woollen bonnets, to

increase it; while the women for the same purpose knot instead of curling the hair, and apply to it glue or resin. When we add that a fetid odour attends the complaint, it will readily be imagined that the subjects of it present a disgusting exhibition of filth and disease. It is looked upon by many as a special gift of Providence, as preventive of other sickness and calamities, while a beggar possessing a plica finds in it a certain resource for procuring alms. The hair thus sometimes increases prodigiously, and while a length of two or three feet is often met with, in other cases it has trailed along the ground as the individual walked. The nails frequently partake of the disease, becoming yellow, long, and crooked, like the talons of a bird. The chief inconvenience attending the affection is the great weight of the hair, which sometimes amounts to several pounds, while any dragging motion applied to it, by irritating the bulbs, is productive of great suffering. The beard often becomes plicated in the same manner. Bachstrom mentions that of a Jew which touched the ground; and Corona saw at Rome a Polish hermit whose beard fell from his bed on to the floor. Various animals are subject to this disease, but it is especially among horses that it is found both in Poland and Russia: the Pole leaves no means untried to produce the plicated state of the mane of his horse, which sometimes acquires a great length.

Although this disgusting disease has been attributed to various causes, filth is now pretty generally believed to be the most predominant: it is seldom seen among the better classes, but is especially found among the Polish Jews, a large proportion of the community, and perhaps the filthiest inhabitants of Europe. The French surgeons soon cured the Polish recruits by cutting off the hair, and paying great attention to cleanliness, while the disease has diminished in proportion as the condition of the population has improved.

The emanations from the surface of the earth, known by the appellation of *miasmata*, or *malaria*, although we are ignorant of their nature, produce very marked effects upon the human economy in the localities where they exist. In our own country these miasms chiefly proceed from marshy districts, producing the well-known disease called ague or intermitting fever, and which prevails endemically in the fenny and swampy districts of Lincolnshire, Cambridgeshire, Essex, &c. In warmer climates, and especially when aided by deficient or bad food, and the accumulation of animal filth acting upon a dense population, the several descriptions of pestilential fevers are produced, as, for example, those which ravage the south of Europe, the coasts of Africa, and the West Indies. The extent to which the malaria prevails in the Campagna di Roma is well known, causing all who can do so to quit Rome from the month of July to that of October. Although marshy districts are well known as being pre-eminently capable of producing the malaria, yet are they not exclusively so: the result of numerous observations proves that the only circumstances essential to its production are the recent presence of water or mere moisture, and the influence of solar heat. When the quantity of water present is very great, the effects of the malaria frequently do not manifest themselves until this subsides. Thus travellers in Africa have found the danger greatest at the commencement of the rains; when these have continued some time, the sickness has abated, again to be renewed upon their cessation, when the soil has become somewhat dried by the evaporation from its surface. So in the Burmese war it was found that at the subsidence of the inundations our troops chiefly suffered. Dr. Ferguson relates that a most destructive form of fever showed itself in the army which pursued the course of the Guadiana after the battle of Talavera, that river being dried up into little pools. At other times, during the Peninsular war, the worst fevers were found to occur when the great heat which prevailed had dried up the surface of the earth, the emanations escaping from the cracks and fissures which resulted. The collections of low brushwood, or of reeds and grass termed jungles, generate a malaria, producing what has been called the jungle fever. The inundation and draining of rice-grounds has proved a most fertile source of disease both in India and Europe. Napoleon intended to have prohibited its cultivation in Italy and France, as the emperor of Russia had already done in part of his dominions.

Other sources of malaria are found in the cultivation of indigo, the steeping of flax, the mud left after the drying up of ponds and marshes in summer, the turning up of land which has long laid as pasture, neglected drains and sewers in warm weather, &c. &c. Dr. M'Culloch observes that alluvial ground, even when not marshy or intersected by ditches, is yet often very productive of malaria, as is seen in the vicinity of the Swiss lakes and along the borders of the principal rivers of France. The peat-bogs in Scotland and Ireland do not produce malaria.

Many circumstances influence the development of the effects of malaria; thus it has sometimes been carried to great distances, and to situations topographically healthy, by winds and currents of air; while also the felling of woods and forests has often, by exposing a quantity of damp soil to the action of the sun's rays, generated miasmata (or by the removal of a natural screen which had heretofore resisted their progress from surrounding parts), in a site hitherto uncontaminated by their influence. It is sometimes very local in its influence; thus, the inhabitants of one side of the Kent road near Rochester suffered severely from ague, while those on the opposite were quite free from it. Strangers are sometimes less liable to be attacked in malarious districts than the inhabitants. Sir James Clark found this to be the case with the French, German, and English artists residing at Rome, who seldom were seized with the fever until the second or third year of their residence; and he considers the fears of suddenly acquiring the malaria by merely passing through its districts as quite groundless. The residence in a malarious region not only disposes to the production of attacks of fever, but to a general disorder and decay of the vital powers; and the change which thus takes place is forcibly depicted in the countenance. Dr. James Johnson, an experienced traveller, describing it in the Lombardo-Venetian plains, thus expresses himself:—"The alluvial debouches of the Scheldt, the Nile, the Oroonoko, Euphrates, Ganges, Danube, and Po, have so deteriorated the health of man, and stamped on his visage such indelible marks of disease, that the most superficial observer can never forget the humiliating portrait. Dr. M'Culloch remarks that the inhabitants of France and Holland are very averse to allowing that any of the maladies result from the influence of malaria, and endeavours to explain their origin in a variety of ingenious modes. He says that it may excite a smile in our country to know that "the people of Walcheren repelled with no small indignation, at the time of the celebrated visit of our troops, the charge of unhealthiness which was brought against their beloved birth-place."

[To be Continued.]

Necessity for Pleasures.—In every community there *must* be pleasures, relaxations, and means of agreeable excitement; and if innocent ones are not furnished, resort will be had to criminal. —*Channing.*

[The Monk and the Friar.]

CHAUCER'S PORTRAIT GALLERY.

THE MONK.

The order of regular priests in the Roman Catholic church, that is to say, of those who had taken vows of perpetual chastity and poverty, was divided into two classes, monks and friars. The chief point of distinction between them was, that the monks were forbidden the possession of private property, and whatever they held they held in common, whilst the friars renounced all property, whether as individuals or as a community. Each of these classes was again subdivided into various orders and fraternities. Chaucer's monk belongs to the order of the Benedictines, which derived its name from St. Benedict, who was born in Italy about the year 480; and who at the tender age of fourteen hid himself in a cavern in a desert for a considerable time, where he was supplied with provisions through the care of a friend, who had to descend with them by a rope. The fame of the ascetic soon spread, as people flocked to him from all quarters. About 528 he removed to Mount Cassino, where, having converted the inhabitants from paganism, and overthrown the statue of Apollo, he founded the order bearing his name, which quickly spread all over Europe. It was introduced into England by St. Augustine and his brethren in 596, when they came to convert the Anglo-Saxons to the Christian religion. So rapidly did the order progress here in public estimation, that its revenues in the course of time exceeded the revenues of all the other monastic orders put together. All the abbeys in England prior to the Norman conquest were filled with its votaries; and down to the Reformation all the mitred and parliamentary abbots, excepting the prior of the Knights of St. John of Jerusalem, were Benedictines.

The duties of a monk may be thus briefly summed up:—to pray, groan, and weep for his faults; to watch, and abstain from sensual pleasures; to labour with his hands; to throw off the cares of the world, and attend solely to their celestial interests; to keep within the cloister, and perform all the routine of his appointed duties with faithfulness and regularity. If he aspired to the government of his fellow-monks, it appears that besides a stricter observance of the rules of "St. Maur and St. Benet" (Benedict), various accomplishments were expected to be superadded. Some time in the thirteenth century, the prior and convent of St. Swithin's at Winchester, in recommending one of their brethren to the convent of Hyde as a proper person to fill the abbacy then vacant, include among his other and more spiritual qualifications his knowledge of glossing, writing, illuminating, and chanting. Such then was, according to theory, the very man Chaucer had to describe. A very different picture, however, awaits us in the poet's verses, and one, for the time of their composition, infinitely more true:

"A monk there was, a fair for the mast'ry*;
An out-rider that lovéd venerie†;

* *A fair for the mast'ry, i.e.* one well fitted for the management of the community to which he belongs. † Hunting.

A manly man, to be an abbot able.
Full many a dainty horse had he in stable;
And when he rode, men might his bridle hear
Gingéling in a whistling wind as clear
And eke as loud as doth the chapel bell,
There, as* this lord was keeper of the cell.
The rule of St. Maur and of St. Benéit†,
Because that it was old, and somdele strait,
This ilké monk let oldé thingés pace;
And held after the newé world the trace."

As to the text

"That saith that hunters be not holy men;
Ne that a monk when he is rekkéless‡
Is like to a fish that is waterless;
This is to say, a monk out of his cloister:—
This ilke text held he not worth an oyster.
And I say his opinion was good:
What should he study, and make himselven wood
Upon a book in cloister, alway to pare?
Or swinken§ with his handés, and laboúr,
As Austin bit‖? How shall the world be serv'd?
Let Austin have his swink to him reserv'd.
Therefore he was a prickasoure ¶ a right:
Greyhounds he had as swift as fowl** of flight:
Of pricking, and of hunting for the hare
Was all his lust ††; for no cost would he spare."

The love of hunting, which Chaucer has here described as so conspicuous a feature of his Monk's character, receives numerous illustrations from the history of the religious houses of England. Thus we find that the Archdeacon of Richmond, on his initiation to the priory of Bridlington, in Yorkshire, in 1216, came attended by ninety-seven horses, twenty-one dogs, and three hawks. In 1256, Walter de Suffield, Bishop of Norwich, bequeathed by will his pack of hounds to the king; whilst the abbot of Tavistock, who had also a pack, was commanded by his bishop, in 1348, to break it up. A famous hunter, contemporary with Chaucer, was William de Clowne, abbot of Leicester, who died in 1377. His reputation for skill in the sport of hare-hunting was so great, that the king himself, his son Edward, and noblemen paid him an annual pension to hunt with him.

The cell of which this Monk was "keeper" was most probably one of those offshoots from the parent houses, which, though subordinate to the latter, had their own officers and domestic management, and were sometimes very wealthy; occasionally indeed, they grew into so much importance as to achieve independence, and obtain the rank of a convent or priory. It is thus only that we can explain the fact of Chaucer's Monk being able to have "many a dainty horse in stable," or to dress in the style that he does. No mere monk would have been allowed to keep to himself the requisite wealth, and the "keeper" or "lord" of an insignificant cell would not have had it to keep. In the Sutherland manuscript the passage concerning the Monk's bridle

"Gingéling in a whistling wind as clear
And eke as loud as doth the chapel bell,"

is illustrated by golden bells on the bridle and trappings on the horse. The custom is supposed to have been borrowed from the knights, among whom it was made a matter of importance to have their bridles well hung with bells, and the neglecting to do so was looked upon as a mark of meanness or poverty. Arnaud of Marsan, an old troubadour, gives a reason for its observance:—"Nothing is more proper to inspire confidence in a knight and terror in an enemy." Wickliffe, the contemporary, and, perhaps, friend of Chaucer, has a passage happily illustrative of the truth of Chaucer's description. In his 'Trialogue' he inveighs against the priests for their "fair horses, and jolly gay saddles and bridles ringing by the way." The remainder of Chaucer's description is as follows:—

"I saw his sleeves purfled at the hand
With gris*, and that the finest of the land.
And for to fasten his hood under his chin
He had of gold ywrought a curious pin;
A love-knot in the greater end there was.
His head was bald, and shone as any glass,
And eke his face as it had been anoint.
He was a lord full fat and in good point.
His eyen steep and rolling in his head,
That steamed as a furnace of a lead.
His bootes supple, his horse of great estate,
Now certainly he was a fair prelate.
He was not pale as a forpined† ghost.
A fat swan loved he best of any roast.
His palfrey was as brown as is a berry."

We have already referred to the golden bells in the pictured representation of the Monk in the Sutherland manuscript; in other respects also that representation agrees minutely with the text, and sometimes illustrates it. The habit of the Benedictines was a black loose coat or gown of stuff, reaching down to their feet, with a cowl or hood of the same, and under that another habit, white, as large as the former, made of flannel, with boots on their legs. In the manuscript, accordingly, we have the black gown, with full sleeves, and a glimpse of the supple boots beneath. The monk has by his side two hounds, with blue collars and gilded buckles. The poet has remarked that the sleeves of the Monk's tunic are edged with fur, "the finest of the land," and doubtless as expensive as it was beautiful. One of Wolsey's ordinances for the reformation of the Benedictines, in 1519, was especially directed against this particular feature of monkish foppery.

* Or, in other words,—there, where this lord, &c.
† Benedict.
‡ Mr. Tyrrwitt thinks Chaucer wrote *reghelles*, a Saxon compound signifying without rule, "as the known sense of rekkeles, viz. careless, negligent, by no means suits with this passage." With due respect to so high an authority, we cannot but observe that it seems to us the passage as it stands conveys the very sense the critic desires it should convey; what is a reckless man, but one whom the ordinary rules of conduct have ceased to bind?
§ Toil, drudge. ‖ Biddeth. ¶ A hard rider.
** Birds. †† Pleasure, delight.

THE DEATH OF PLANTS.

THE same volume of Brande's 'Journal' we recently quoted, as containing an interesting article upon the Dissemination of Plants, from the pen of M. Mirbel, also contains a paper upon their death, by the same eminent botanist. We present an abstract of it:—

Plants, as well as animals, unless destroyed by casualties or disease, are doomed to die of old age. Several of the *Mucores* (Moulds), *Byssi*, and *Mushrooms* perish in a few days or even hours. The *herbaceous* plants called annuals die within the year, and this almost independently of climate; the propagation of the species having been secured by the ripening of the seed. In the biennials the flower-stem is not evolved and seed produced until the second year, after which the plant perishes. In the perennials the parts exposed to view perish annually in like manner; but the root surviving, new stems arise from it every spring. In most *woody* plants death does not occur until fructification has recurred for a greater or less number of years; some of the monocotyledona, however, as the sago-tree, and the umbrella-tree (*corypha umbraculifera*), with immense fan-formed leaves of eight or ten yards in length, only bear fruit once, and then die.

If the herbaceous perennials and woody plants were viewed as simple individuals, they would almost seem

* Fur. † Wasted away.

as not liable to death from old age; but in these plants we must distinguish between the new part, which lives and grows, and the old, which has ceased to do so, and is therefore dead. When these plants propagate their race by seeds, the seed must be considered as an embryo plant, a new and different individual, independent and unconnected with that from which it derived its existence; but when they are propagated by a continuous evolution of like parts, these are as a series of individuals, which issue from the surface, the one of the other, in an uninterrupted sequence, continuing, however, in some instances permanently united. But in neither of these cases are the *individuals* perpetuated, although their succession or *race* becomes so.

All the parts of the young herbaceous annual are susceptible of enlargement; the cells of the tubes, at first very small, are soon extended in every way. In process of time the membranous walls, fortified by the absorption of nutritious juices, grow thicker, and lose by degrees their original pliancy. The membranes once hardened, excitement ceases to be produced, and the vital functions are at an end; nourishment is no longer drawn, growth is at a stand, and the plant, unable to resist the ceaseless attacks of the external agents employed by nature for its destruction, decays in a short time.

For the same reasons the stems of herbaceous perennials decay, but in these the root is regenerated by a succession of evolutions. So too in the shrubs and trees, the liber, or inner bark, represents the herbaceous plant, and, like it, has only a short existence as such. For when vegetation revives in the woody part of a plant, on the return of spring, it is because a new liber has replaced, under the bark, the liber of the preceding year, which has hardened and become wood. This explanation will equally apply to the meanest shrub and to the giants of the vegetable world, such as the cedars of Lebanon, nine yards in girth, from the measurements of Labillardière; the stupendous chesnuts of Mount Etna, one of which Howell states measured seventeen yards in circumference; and the Baobab of Senegal, ten or twelve yards in girth, and, according to the computation of Adanson, five or six thousand years old; in all of these vegetation is maintained by the annual production of the thin layer of liber at the inner surface of the bark. The concentric layers of preceding libers constitute the mass of the wood, serving merely to support the newly-formed parts, and to conduct to them their nutritious juices. Nay, for the performance of these offices this wood need not always be entire, for willows and chesnuts, even when quite hollow, will continue to grow with vigour; but in their soundest state the removal of the bark is their destruction.

Thus, as the old parts of the roots of the herbaceous perennial continue constantly to die away under ground, and are succeeded by new ones, and the concentric layers which constitute the wood or heart of the trunks of trees are no other than the accumulated remains of bygone generations, in which vegetation and life are entirely extinct, we find that the immortality imparted to this form of existence is only apparent, and that the individuals endowed with it perish in due course, as all other forms of organized bodies.

As the age of the tree in nowise diminishes the vigour of the liber, and as a sound well-grown scion from an aged but healthy tree affords as good a cutting for propagation as that taken from a younger; so, we may infer, that according to the course of nature, the progress of regeneration by continuous evolution would never be arrested, if the overgrown size of the branches and stem, the hardening of the wood, and the obstruction of the channels which permeate it, did not impede the circulation of the sap, and consequently its access to the liber.

The life of trees has been commonly divided into three stages—infancy, maturity, and old age. In the first the tree increases in strength from one day to the other; in the second it maintains itself without sensible gain or loss; in the third it declines. These stages vary in every species according to soil, climate, aspect, and the nature of the individual plant. The common oak usually lasts from six to nine hundred years, and the stages of its existence are of about two or three hundred years each. It, as well as the chesnut, has been observed to live longer upon a dry than a wet soil.

Every species, to attain its due growth, requires a certain temperature to be found within limits of a greater or less extent. The oak, the fir, the birch, &c. thrive most towards the north; the ash, the olive-tree, &c., in the warmest parts of Europe; the baobab, the ceiba, and the palm flourish only between the tropics. Sir Humphry Davy considered that the different quantities of carbon furnished by the various woods would afford a tolerably accurate measure of their respective longevities; those in which earthy and carbonaceous substances prevailed being the most enduring, and those in which gaseous elements proportionally abounded, the least so. However well this rule may apply to the indigenous trees of Europe, it is not probable that many of the tropical trees of great longevity (as the baobab, &c.), but of loose and soft texture, would yield the same proportion of carbon as our oaks, elms, &c., whose existence is comparatively brief. The same distinguished writer also believed that trees of the same species grow to a more advanced period in the north than in the south; but in truth every tree lives the longest when it is in that climate which is best adapted to its nature: and thus, although more oaks and firs are found of a great age in the north than in the south of Europe, yet, on the other hand, the ashes of Calabria and Sicily are more long lived than those of Great Britain and Prussia.

In proportion as a tree increases in size, the vessels of its ligneous layers become obstructed, and the sap circulates with less freedom; hence, absorption and secretion decrease after youth, in proportion as the bulk of the tree is enlarged; the liber is less vigourous; the buds and roots become fewer and feebler; the branches wither; the stem decays at the head; water settles in the injured parts; the wood moulders away. Ere long, the annual liber loses the power of completing its regeneration; new parts are no longer evolved, and the tree perishes. The tree after death is overrun by various cryptogamous plants; it attracts and imbibes moisture no longer, as formerly, by the absorbing powers of its organs, but by the hygrometrical property it derives from its porosity, and the chemical action of the elements which compose it; the oxygen of the atmosphere consumes a part of its substance; water is generated and carbonic acid disengaged; the rest is resolved into vegetable mould (humus), a fat brown powdery substance, eminently fertile, in which we find in different proportions the same elements as those of which vegetables are composed, and which have the faculty of decomposing air and combining with its oxygen.

It is thus the career of plants is terminated in the order of things. The earth they adorned in the period of vegetation is fertilized by their remains: germs impregnated with new life have already been confided to its bosom, ready to supply the bygone generations, and, through the death of individuals, an unfading youth is secured to the race.

REAPING.

REAPING (or cutting the corn when it is ripe) is one of the most important operations of harvest. It requires many hands to accomplish it in proper time, so that the corn which is ready for the sickle may not be too ripe and shed, nor the fair weather be allowed to pass before all the corn is secured in barns or stacks. The labourers who are required all the year for the common purposes of husbandry seldom suffice for the harvest, especially on extensive farms, and recourse is usually had to the assistance of mechanics and artisans from the neighbouring towns and villages where the population is considerable, or labourers are induced by good wages to come from a distance.

The common reaping-hook, or sickle, with which the corn is usually cut, is one of the oldest instruments of husbandry; and the goddess Ceres was generally represented by the ancients with a sheaf of corn and a sickle in her hand. In reaping with the sickle, a portion of the stems is collected with the left hand, and held fast; while the sickle in the right hand is inserted below the left, taking the stems in its semicircular blade, and cutting them through by drawing the sickle so as to act as a saw, for which purpose the edge is finely serrated in a direction from the point to the handle. The heads of the corn, with the upper part of the straw, are then laid on the ground in quantities which may readily be collected into a sheaf. Practice soon gives dexterity to the reaper; and he finds it more expeditious to cut small quantities in succession until he has filled his hand, than to attempt to cut through a large handful at once. Severe wounds are often inflicted on the fingers of the left hand by beginners, even to the loss of a finger; but this soon makes them cautious and expert. The division of labour is introduced with advantage amongst a band of reapers. A certain number cut the corn, while others follow to gather the sheaves; some only preparing the bands, and others tying them and setting up the sheaves into stooks or shocks, which usually consist of ten or twelve sheaves. The smaller the sheaves are, the less injury the corn sustains in a wet harvest, as the moisture in a thick sheaf does not so readily evaporate. Hence it is the interest of the farmer to see that the reapers do not make the sheaves too large. In many places there is a regular measure for the circumference of a sheaf, which should never exceed thirty inches. The bands are made by taking two small handfuls of the cut corn, and crossing them just below the ears into a knot. The sheaf is then pressed with the knee, and the band drawn tightly around it. The ends are twisted together like a rope, and inserted under the band, which effectually fastens it. The sheaves should be so tied that there may be no danger of their falling loose when pitched into the cart or stacked, without being so tight as to prevent the moisture in the straw from evaporating. They should not be tied too near the ears, but rather nearer to the butt. The sheaves, when tied, are placed two and two on the butt-ends, with the ears leaning against each other: sometimes they are placed in a circle, all the ears being together, and the butts slanting outwards: a sheaf is then opened, by inserting the hand into the middle of the ears, and reversed over the tops of the preceding, forming a cone, and covering all the other ears, while it hangs down around them. In this position they will bear much rain without injury.

Wherever the sickle is used for reaping, the straw is cut at a certain height from the ground, and the remainder forms a long stubble, which is usually mown at leisure after harvest, and carried into the yard for litter; but in the neighbourhood of large towns, where straw is sold at a good price, or exchanged for stable dung, it is important that as much as possible of it should be cut with the corn. This has introduced the practice called fagging, and sometimes bagging, the origin of which provincial expressions is not well known. The instrument used for this purpose partakes of the nature of a scythe, as well as of a reaping-hook. It is shaped like a sickle, but is much larger and broader; and instead of being indented like a saw, it has a sharp edge like a scythe, which is renewed when blunt by means of a stone or bat. The fagging-hook cuts the straw close to the ground by a stroke of the hand; and its curved form is only useful in collecting stray stems, and holding a certain quantity of them between it and the left hand of the reaper when he makes up a sheaf. A certain quantity is cut towards the standing corn, the left hand pressing it down at the same time. When as much is thus cut as would make half a small sheaf, the reaper comes backwards, cutting in a direction at right angles to the first, and rolling together the two parts, which he carries in the bend of his hook and places on the band which has been prepared for him. A full-sized sheaf is usually composed of two cuttings. Two men will fully employ a third to make bands for them, tie up the sheaves, and set them up. This method of reaping is laborious, on account of the stooping required to cut near the ground. The Hainault scythe, which has been described in most agricultural works, does the work better, and with less fatigue. It is in fact a fagging-hook, not quite so curved, of which the handle is longer, and placed at an angle with the plane of the blade. It requires some practice to give the proper swing to it by a peculiar motion of the wrist; but when this is once acquired, a considerable saving of labour and time is effected. Many attempts have been made to bring it into use in England; but, from the obstinacy of the labourers, or the want of perseverance in the masters, without much success. A better instrument, however, on extensive farms is the cradle-scythe, which, in the hands of an expert mower, will do more work and more effectually secure all the straw than any other instrument.

When the saving of time is considered, as well as expense, there seems to be no doubt than on an extensive farm the scythe is far preferable to the sickle for cutting every kind of grain. Barley and oats are usually mown, and carried without tying them into sheaves, but this is a slovenly and wasteful practice: by means of the cradle-scythe they may be mown so regularly as to be readily tied into sheaves; and the additional expense will be fully compensated by the saving of all the corn which, being on the outside of the stack, is lost by the depredations of small birds.

Beans are usually reaped by the sickle, the stems being too strong and too wide apart to admit of the scythe. Where it can be done conveniently, without the soil adhering too much to the roots, it is better to pull them up, and tie them in bundles with straw bands, or tar-twine, which will be found both a convenient and economical method.

Peas are generally reaped by means of two large hooks similar to the fagging-hooks, one of which is held in each hand; and the stems, which are generally much interwoven, are partly cut and partly torn from the roots, and so rolled up into a small bundle laid loose in order that it may dry. Tares are reaped in the same way.

There have been many attempts to introduce machinery for reaping corn. Some of the inventions were ingenious and promised well, but none, when put to the test, answered the expectations formed. The various inclinations of the straws prevent any regular mode of cutting. Till some better invention appears, the scythe will probably be found the cheapest and most expeditious instrument for reaping the corn.